IN THE CLAIMS:

1 - 13. (Cancelled)

14. (Currently amended) A method for controlling flooding in a bridged network having a bridge connected to a plurality of networks, the method comprising:

~~processing a packet having a destination MAC address to determine whether a mapping between the destination MAC address and a port exists;~~

~~if no mapping between the destination MAC address and port exists, then until a reply is received from a port associated with the destination MAC address, iteratively:~~

~~performing broadcast flooding of packets for a first predetermined time period; and~~

~~ceasing broadcast flooding of packets for a second predetermined time period.~~ passing a packet to a filtering module, and indicating a MAC address associated with the packet to the filtering module;

determining whether the received MAC address exists in a table or needs to be added as an entry to the table;

if the MAC address already exists in the table then incrementing a packet count field, the packet count field associated with the MAC address already existing in the table and indicating how many packets have been sent to the MAC address;

if a quiet flag associated with the MAC address is not set to true within the table and a flooding timer associated with the MAC address has not expired, the flooding timer initially set to a first predetermined value and decremented periodically, then broadcasting the received packet to a plurality of interfaces; and

if the quiet flag associated with the MAC address is set within the table and a restart timer associated with the table has expired, the restart timer initially set to a second predetermined value and decremented periodically, then:

resetting the quiet flag in the table to false; and

setting a flooding timer to an initial value; and broadcasting the received packet to a plurality of interfaces.

15.   (Currently amended)   The method of claim 14, wherein said first predetermined ~~time period~~ value and said second predetermined ~~time period is~~ value are set by a network administrator.

16-17. (Cancelled)

18.   (Currently amended)   The method of claim 14, wherein, an entry is made in ~~a filter~~ the table if no mapping between the MAC address and a port exists, ~~then until a reply is received from a port associated with the destination MAC address~~.

19.   (Currently amended)   The method of claim 18, wherein the entry is removed from the ~~filter~~ table after a port associated with the destination MAC address replies to the broadcast flooding of packets.

20.   (Currently amended)   The method of claim 14, wherein an entry is made in the ~~filter~~ table indicating a number of packets that are directed at the destination MAC address.

21. (Currently amended)   The method of claim 20, wherein the entry indicating the number of packets directed at a destination address is used to determine which entry to delete from the ~~filter~~ table if the ~~filter~~ table becomes overpopulated with entries.

22. (Currently amended)   A computer program product containing instructions which, when executed by a computer, controls flooding in a bridged network having a bridge connected to a plurality of networks, by:

~~processing a packet having a destination MAC address to determine whether a mapping between the destination MAC address and a port exists;~~

~~if no mapping between the destination MAC address and port exists, then until a reply is received from a port associated with the destination MAC address, iteratively:~~

~~performing broadcast flooding of packets for a first predetermined time period; and~~

~~ceasing broadcast flooding of packets for a second predetermined time period.~~

passing a packet to a filtering module, and indicating a MAC address associated with the packet to the filtering module;

determining whether the received MAC address exists in a table or needs to be added as an entry to the table;

if the MAC address already exists in the table then incrementing a packet count field, the packet count field associated with the MAC address already existing in the table and indicating how many packets have been sent to the MAC address;

if a quiet flag associated with the MAC address is not set to true within the table and a flooding timer associated with the MAC address has not expired, the

flooding timer initially set to a first predetermined value and decremented periodically, then broadcasting the received packet to a plurality of interfaces; and

        if the quiet flag associated with the MAC address is set within the table and a restart timer associated with the table has expired, the restart timer initially set to a second predetermined value and decremented periodically, then:

        resetting the quiet flag in the table to false; and

        setting a flooding timer to an initial value; and broadcasting the received packet to a plurality of interfaces.

23.   (Currently amended)   The computer program product of claim 22, wherein said first predetermined ~~time period~~ value and said second predetermined ~~time period is~~ value are set by a network administrator.

24-25. (Cancelled)

26.   (Currently amended)   The computer program product of claim 22, further comprising instructions which, when executed by a computer, insert an entry in a ~~filter~~ table if no mapping between the ~~destination~~ MAC address and a port exists.

27.   (Currently amended)   The computer program product of claim 26, further comprising instructions which, when executed by a computer, remove the entry from the ~~filter~~ table after a port associated with the ~~destination~~ MAC address replies to the broadcast flooding of packets.

28.   (Currently amended)   The computer program product of claim 22, further comprising instructions which, when executed by a computer, make an entry in

the ~~filter~~ table indicating a number of packets that are directed at the destination MAC address.

29. (Currently Amended)   The method of claim 28, further comprising instructions which, when executed by a computer, examine the entry indicating the number of packets directed at a destination address to determine which entry to delete from the ~~filter~~ table if the filter table becomes overpopulated with entries.

30. (Cancelled)